A Call to Action on Environmental Protection

Public Consultations on Waste Management

Waste Management Advisory Committee

October 2001

A CALL TO ACTION
ON ENVIRONMENTAL PROTECTION

PUBLIC CONSULTATIONS ON WASTE MANAGEMENT

Waste Management Advisory Committee
Derm Flynn, Chair
Catherine Barrett
Jessie Bird
Priscilla Boutcher

October, 2001

105-06974/

Chairman's Message

Dear Minister Wiseman:

In order to fulfill our commitment to you to consult with individuals, communities and interested parties about waste management, the Waste Management Advisory Committee spoke with people from communities across the province.

We had not expected such a consistent, informed and supportive response to our questions and the issue of waste management. Many people have seen modern waste management working during visits to friends and family elsewhere in Canada. The benefits and practicalities of waste reduction, waste diversion, and composting are familiar, accepted - and welcomed here.

During our discussions, several key messages were clear to us:

- people in the province want modern waste management;
- people want to be able to recycle more types of materials;
- we must pool our resources to make waste management affordable for households and communities, so that the money being spent by communities now on waste management will accomplish more;
- community leaders are insistent that political support for waste management must not waver and must continue to be demonstrated through clear policy and consistent actions; and
- we need to ensure people have the information to understand the importance of progressive waste management through an innovative and wide reaching public education program.

People recognize there may be increased costs to individuals, businesses and communities to achieve modern waste management but that the costs of not changing our practices would be even greater, and be borne by our children, our communities and our environment.

On behalf of the Committee I thank all of those people who spoke with us or submitted comments in writing. We hope we have conveyed your messages effectively.

As Chair I very much appreciated the support and participation of Committee members Catherine Barrett, Priscilla Boutcher and Jessie Bird and the committee's secretariat, Leslie Grattan and Mary Byrne throughout the consultations.

On behalf of the Committee I am pleased to submit this report.

Sincerely,

Derm Flynn, Chair
Waste Management Advisory Committee

Executive Summary

The March 13, 2001 Speech from the Throne identified Government's intent to address the issue of waste management in Newfoundland and Labrador. As part of this initiative, communities, individuals and interested parties were to be asked for their views on how the province should proceed. Their input would help form a provincial waste management strategy.

On May 15, 2001, the Minister of Environment announced the appointment of a four member Waste Management Advisory Committee. Their task was to meet with people across the province, seeking their views, ideas and information on the present and future waste management practices in Newfoundland and Labrador.

The Committee hosted seventeen round table discussions across the province, meeting with more than 270 individuals, and found consistent support for changes to waste management. Several key messages emerged from the discussions.

People in the province want to protect the health of their communities and environment and realize that improving waste management is part of this goal. People realize that there are both costs and benefits to waste management. Many people are familiar with the waste management measures in other provinces and have seen that new facilities and methods of handling waste are necessary and that these changes have also created business and employment opportunities.

It was recognized throughout the discussions that communities will have to pool resources and implement regional waste management systems in order to meet accepted standards. Government assistance through policy, enforcement and cost sharing will be necessary.

An innovative, wide reaching public awareness and education program about waste management is essential. People must understand why we must change our treatment of waste and learn their role in achieving this goal.

Individuals, communities, business and industry, and governments must share responsibility for waste management. The Committee makes recommendations for actions by all parties to bring about the changes in attitude, behaviour and waste handling that are necessary to achieve national standards of waste management.

Recommendations

1) Government should initiate a wide reaching public awareness and education program on waste management.

2) Building on the ongoing research initiatives of the Multi-Materials Stewardship Board (MMSB), Government should direct the MMSB to initiate stewardship programs, as soon as practical and within the next six months, for cardboard and newsprint.

3) Government should continue to encourage communities to develop and implement regional waste management systems.

4) Government should ensure there is a regulatory basis for the establishment of regional waste management authorities, which includes local service districts and unincorporated areas.

5) In isolated areas, emphasis should be on improving existing disposal sites and enhancing opportunities for diversion, e.g. assisting with transportation of recyclables.

6) Regional waste management systems must address hazardous waste.

7) Government should consider means of encouraging entrepreneurs and innovators to investigate value added products as well as the viability of a central diverted waste marketing agency/waste exchange.

8) Composting should be encouraged through information and demonstration projects for collection and composting techniques at the household, community and commercial scales.

9) Government should aggressively pursue industry stewardship agreements.

10) Government should initiate a study to determine the sources, volume and types of packaging coming into the province and the associated waste management policies and practices of sending and receiving parties. This study would provide information for a possible provincial policy on packaging.

11) Green Depots should continue to be an integral part of the province's waste management system.

12) Government should work with organizations such as the Newfoundland Environmental Industry Association, Memorial University of Newfoundland, and the College of the North Atlantic to ensure that the training and research and development programs are available to support business and professional opportunities associated with the modernization of waste management in this province.

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1.0 INTRODUCTION

"My Government is also committed to addressing the issues surrounding solid waste management and the new department has been mandated to develop a long term strategy in this area.
We will be seeking the views of the people, municipalities and interested parties on how the government should move forward on this issue."
- Speech from the Throne, March 13, 2001

The March 13, 2001 Speech from the Throne identified Government's intent to address the issue of waste management in Newfoundland and Labrador. As part of this initiative, communities, individuals and interested parties would be asked for their views on how the province should proceed. Their input would help form a waste management strategy for the province.

On May 15, 2001, the Minister of Environment announced the appointment of a four member Waste Management Advisory Committee. Their task was to meet with people across the province, seeking their views, ideas and information on the present and future waste management practices in the province.

The Waste Management Advisory Committee is chaired by Derm Flynn, President of the Newfoundland and Labrador Federation of Municipalities. The other members are Jessie Bird, former councillor and mayor of Cartwright, Priscilla Boutcher, Mayor of Corner Brook, and Catherine Barrett from St. John's, President, Recycling Depot Operators Association of Newfoundland and Labrador.

The committee hosted sixteen roundtable discussions (two as teleconferences) in communities throughout Newfoundland and Labrador during the month of June. A seventeenth meeting was held in the Bonavista area, in August, at the request of communities in the area. There was a high level of interest in the discussions, with more than 270 people attending the meetings and 30 written submissions received.

2.0 BACKGROUND

The volume of material going for disposal was identified as a concern across Canada by the Canadian Council of Ministers of the Environment in 1989. A goal was set to reduce the amount of waste going for disposal by 50 per cent, by the year 2000. In Newfoundland and Labrador, early steps to address this concern included surveys to compile information on existing waste disposal sites; banning disposal of untreated sewage sludge and petroleum contaminated soil from landfills; and initial public discussions on a regional approach to waste management.

The inventory completed in 1992 identified close to 240 waste disposal sites. At least half of these sites are unattended with no control of access or of what or how much waste is deposited. Many of these sites use open burning, others are using now obsolete teepee incinerators. Typically, a single site serves only two or three communities and about 2000 people, and most sites are within 20 kilometres of the next site.

Government took key steps in 1997 with the establishment of the Multi-Materials Stewardship Board (MMSB) and the implementation of the first province-wide waste diversion program, the beverage container deposit refund program. The role of the MMSB is to develop, implement and, where appropriate, manage waste management initiatives in the province. The MMSB reports to the Minister of Environment.

Since 1997, the MMSB has actively promoted recycling, with a focus on working with schools throughout the province. The schools program, with 275 schools participating, has been very successful, both in raising environmental awareness and as a source of fundraising.

Most recently, the MMSB has provided funding, through the Newfoundland and Labrador Waste Management Trust Fund, for projects on regional waste management systems and waste diversion. It has plans to initiate a second, province-wide waste diversion program, for scrap tires and is completing research on the possibilities for recycling the volumes of paper, magazines, and newspaper available in Newfoundland and Labrador.

Even with these efforts to address waste management, we still have too many unattended waste disposal sites that do not meet today's environmental standards in design or operation. Information from the Waste Management Advisory Committee's round table discussions will be an important input to Government's determination to address this long standing issue with a long term waste management strategy for the province.

3.0 The Consultation Process

It was decided that informal, roundtable discussions of specific questions would provide the most useful forum.

A discussion document, "Protecting Our Environment for Tomorrow," outlining the current state of waste management in Newfoundland and Labrador and the questions to be addressed was prepared. A copy of the paper, a schedule of meetings, and an invitation from the Committee Chair to participate at a local roundtable meeting were mailed to all municipal councils, Local Service Districts, Development Associations, Regional Economic Development Boards, the Green Depot operators, health care boards, business associations, interest groups, environmental and engineering consultants and companies and private citizens with a known interest in waste management. Local newspapers advertised the specific date, time and location of individual roundtable meetings scheduled for their area and invited the public to attend.

Typically, the meetings were scheduled for the evening, in acknowledgement that many of those who would be participating were doing so as volunteers and had jobs during the day. Occasionally, meetings were held in the afternoon to take advantage of people travelling to attend other, planned meetings or workshops, such as the Municipal Leaders Forum in Gander.

Meetings were scheduled for two hours - many went beyond this time to allow for full participation. Committee members would start and end the session with informal conversations with participants.

Roundtable discussions were held in St. Anthony, L'Anse au Clair, Clarenville, Labrador North (teleconference), Stephenville, Corner Brook, Baie Verte, Grand Falls-Windsor, Lewisporte, Gander, St. John's, Happy Valley-Goose Bay, Labrador City, Marystown, South Coast (teleconference), Carbonear and Port Union.

At each roundtable session, the Chair of the Committee welcomed participants, introduced the Committee members and outlined the objectives of the consultations - to listen to people's concerns, ideas, information and questions about

waste management and to report to the Minister of Environment. The information gathered would be used in the development of a provincial waste management strategy.

The Committee Chair also gave a brief description of other government initiatives toward the development of a waste management strategy. Two studies - an assessment of the economic potential of waste diversion in the province and an assessment of waste disposal technologies - are being completed. The MMSB had issued a call for proposals for the development of a used tire program. In addition, with funding from the Newfoundland and Labrador Waste Management Trust Fund, some areas in the province are completing preliminary regional waste management studies.

The senior representative(s) of the host community was invited to start the discussion by describing the existing waste management situation in that area and any associated plans or projects. The discussion then focussed on the following questions raised in the discussion paper:

- What are some specific strategies we can use to achieve 50 per cent reduction in materials going to landfill sites?
- Should waste diversion be voluntary or would disposal bans on specific materials be more effective?
- What are the barriers to increasing waste diversion in your household and your community to include glass, tins, paper, wood, newspaper or organic material?
- What are you prepared to pay for recycling programs to protect the environment for your children and grandchildren?
- What are the conditions or criteria you would want met in order for an engineered landfill to be an acceptable waste management facility for your community?
- Under what circumstances do you feel a modern incinerator, meeting government health and safety standards, would be an appropriate waste disposal method?
- How can communities work together to achieve effective waste management that is both environmentally sound and economically feasible?

- What role, if any, does the provincial government have in assisting communities to share responsibility for solid waste management?

Following the discussion, each participant and Committee member was given the opportunity to make a final comment or observation before the meeting concluded. The Committee Secretariat took notes throughout the roundtable as a record of the discussion.

4.0 What We Heard - Discussions and Submissions

The Committee heard from a broad spectrum of interests - councillors, town managers, concerned citizens, environmental interest groups, environment and engineering consultants and companies and community development associations.

The Committee consistently met with support from round table participants, both for moving forward on waste management and for the opportunity to provide input through an independent committee. There was general recognition that our present ways of handling waste must change, for the health of our environment and communities.

Several concerns and suggestions were repeated throughout the various roundtable sessions. The Committee has incorporated these into key messages identified from the public consultations:

- people in the province want modern waste management;
- people want to be able to recycle more types of materials;
- we must pool our resources to make waste management affordable to households and communities, so that money being spent by communities now on waste management will accomplish more;
- community leaders are insistent that political support for changes to waste management must not waver; and
- we need to ensure people have the information to understand the importance of progressive waste management and their role to achieve it.

"We are trying to reshape history here in this province - the history is to dump anywhere, over the cliff, anywhere."

- Ern Condon, Labrador City

4.1 People Want Modern Waste Management

The Committee heard of people's concern about pollution of air and ground water as well as the more visible smoke, smell and pests resulting from present collection and disposal methods. Not only are there concerns for community health but also for the effects on the growing tourism industry.

The Newfoundland Environmental Industry Association (NEIA) informed the Committee that present waste handling

"Nova Scotia regarded the 50% diversion goal as a real opportunity to adopt new standards. Our attitude is that it's a cost, it's an obstacle to development. In fact, the opposite is true - companies are not operating here because their own company standards are higher."
- John Fleming, NEIA

"practices are considered third world and are hindering the province's economic development. Waste management is an area that requires vast improvement. Newfoundland and Labrador is lagging behind other provinces in Canada and the time for change is long overdue. Our limited recycling and reuse of waste material together with leading the country in emissions of dioxins and furans has become a deterrent to companies considering locating here. Our disregard for our environment only amplifies the backward stereotype we are trying to correct."

NEIA also identified that there are hidden costs to our very low-cost approach to waste handling - missed economic opportunity, decreased health, loss of land for development or tourism with 240 separate disposal sites and the eventual cost of clean-ups.

Modern waste management as considered in the roundtable discussions, includes diversion of materials from disposal, recyclables collected or taken to recycling depots, and disposal at properly designed, built and operated facilities that minimize or eliminate pollution, emissions, and nuisance problems such as litter, gulls and vermin.

It was generally accepted that change to waste management will have to be phased in over a number of years.

Economic Opportunities

Many people who participated in the roundtable discussions are familiar with waste management systems and practices in place elsewhere in Canada. There is general agreement that not only are there benefits to the environment but there are economic opportunities in modern waste management. These opportunities range from waste collection through the management and operation of materials sorting facilities and composting operations to the development and production of value-added products from diverted materials.

"... a recycling plant here, would create jobs here."
- Iris Decker, Local Service District, Ship Cove

Information from Nova Scotia, for example, indicates that a range of business and employment opportunities in that province has been created as a result of their waste management

strategy. It is estimated that 1000 new jobs have been created since the strategy was implemented in 1996, with over 600 of those in manufacturing as well as those directly associated with collection, hauling and sorting of diverted materials. It is important to note that the resulting business and employment opportunities occur throughout Nova Scotia in the various waste management regions, and are not concentrated in one or two major centres.

NEIA states that investment in new waste management systems is not only necessary to protect our environment but is an economic opportunity. Waste management is one of the largest environmental industry markets and new approaches, products, or equipment developed here would meet not only our needs but would have a ready export market.

Two non-governmental volunteer organizations also supported the need for, and the economic benefits of, improved waste management: "We believe that our environment is directly linked to the ability to provide a lucrative eco-tourism industry." (OceanNet, July 2001) "Litter is much less trivial than you think. A clean community is a respected one and has a better chance of attracting new business and tourists than those where litter is common." (St. John's Clean and Beautiful, June, 2001).

For Newfoundland and Labrador, roundtable participants suggested that large central recycling facilities, for example, would create immediate jobs. An incubator mall approach to develop new business and new products was also suggested. Developing a provincial waste exchange would alert companies both within and outside the province as to materials available for further use.

Responsibility

Individuals, communities, business and industry and government share the responsibility for waste management.

"We throw too much away."
- A. Payne, Cow Head

The support of individuals is essential to achieve modern waste management. It is individuals who will take the first step, through their attitude and behavior toward waste management.

The high level of participation in our roundtable discussions by mayors, councillors, town managers and clerks indicates that communities accept their responsibility for waste management. In fact, communities in several areas of the province are anxious to move toward improved waste management. In some cases, their present sites are at, or exceed capacity, and are too close to the community, to water bodies, to roads and tourist sites.

There is a need for interim measures for some communities, but, as much as possible these measures should build toward long term waste management plans for the area. Priorities will have to be based on a number of criteria, including urgency.

"If people see and understand the future implications of not recycling for our children and grandchildren and the fee increase is reasonable, it may be acceptable. There may be offsets, jobs created by recycling may bring children home."

- Lloyd Dalton, Local Service District of Hillview-Adeytown

Participants generally recognized that modern waste management may well cost households, businesses and communities more than what they are and have been paying over the years. There were accompanying cautions, such as "not a lot more", "people won't want to pay triple", "it can't bankrupt us" but also the counter balancing "we can't afford not to".

In several sessions, it was suggested that if people were aware of how much it cost to throw something away, including waste disposal site maintenance, tipping fee and collection services, they would make an effort to reduce waste. Even towns do not necessarily realize the true cost of waste management as such items as use of the town employees, truck or backhoe are often a "hidden" cost of waste management. It was suggested that municipal tax bills should show the fee for waste management separately to help people understand "the cost of garbage".

Some participants recommended that communities should investigate participation in programs such as Tidy Towns. Tidy Towns began in Ireland 40 years ago, as a program to encourage voluntary efforts to improve communities, with competition for a range of awards.

The Committee heard of several examples whereby a community's participation in Tidy Towns had greatly increased community and householder pride, resulting in a cleaner, more attractive community for residents and tourists alike.

Industry Stewardship

"Recycling is not just for homeowners."
- Alex Noseworthy, Town of Fortune

The primary focus of the roundtable discussions was on residential waste and what householders could do to achieve waste diversion. However, business and industry and institutions are major contributors of waste to municipal disposal sites.

Roundtable participants identified the need for business and industry to do more to reduce waste and to manage waste - more industry stewardship. Suggestions ranged from industries managing their own wastes to partnership with communities and government in information and education programs. Companies and stores should stop using plastic bags or we should insist on stewardship by the companies whose names are on the bags. Companies should implement the actions suggested in national packaging programs. Several examples of ongoing initiatives were given, e.g. the Labrador Shrimp Fishermen's Union is working with the Labrador Straits Development Association on a trial composting project with shrimp waste; and Woodward's Coastal Labrador Marine Services has provided containers for storage and shipping for recyclables from Northern Labrador communities.

"In Europe, you must pay for your plastic bags at the grocery store. In North America, where customer is king, - they can have as many plastic bags as they want, free! People don't realize the cost as it is hidden, embedded in the price of products."
- Lidija Chubbs, resident, Happy Valley - Goose Bay

Canada Mortgage and Housing Corporation provided the Committee with one of their publications that focusses on stewardship of construction and demolition waste (C and D Waste), "Making a Mole Hill Out of a Mountain". Eastern Home Builders Association indicated that a previous seminar with their members on waste management had not been successful but that the Association was very interested in addressing the issue and would work with others to do so. In some areas of the province, steps are already being taken to address C and D waste. For example, in Happy Valley-Goose Bay the current demolition of buildings on the armed forces' base includes significant efforts to salvage and recycle materials.

It was suggested that Government should encourage industry stewardship. Possibilities include packaging for goods coming into the province (e.g. insist on reusable containers) and make waste management a cost of doing business. The cost of

waste management can be included in the price for items, such as is done with tires in Nova Scotia. This practice is already in use in Newfoundland and Labrador by some companies that sell oil and lubricants.

Discussions with people involved in implementing the Nova Scotia Waste Management Strategy indicated that separate, stewardship agreements were necessary e.g. with the dairy industry to recycle milk containers, with pharmacies to provide containers for returned needles, and with the newspaper industry. There are examples of both voluntary and mandatory stewardship programs in Nova Scotia with more stewardship agreements being negotiated - for example, Nova Scotia is moving toward a regulated paint stewardship program.

The Rechargeable Battery Recycling Corporation (RBRC) of Canada made the point that "provincial governments must provide the framework for waste management by setting policy, regulations and standards that will encourage the establishment and continued operation of industry stewardship programs." The RBRC Canada raised a concern that regulatory and administrative procedures for recycling materials can be more onerous than for the original product.

Regulation and Enforcement

While municipal governments are responsible for the implementation and operation of waste management, the provincial government sets the standards (in conformity with Canada Wide Standards) and issues Certificates of Approval for the operation of waste handling and disposal facilities and operations.

"We have done so much damage to our province, surely people will see the need and voluntarily change. If not, government must force us to do so."
- Fred Best, Mayor, Town of Clarenville

Communities need assistance from government in following up on incidents such as illegal fires and illegal dumping. A program equivalent to "Dial-a-Poacher" for illegal dumping was suggested on several occasions.

The majority of round table participants expect that penalties and disposal bans will be a necessary part of a new approach to waste management in the province. Disposal bans are part of Nova Scotia's waste management strategy. Bans

"Even if it takes laws and fines to make it happen, recycling needs to be increased."
- Cyril Taylor, Nordic Economic Development Corporation

were phased in over a number of years as alternatives for the specific materials were identified.

In provinces where source separation is in place, such as Prince Edward Island and Nova Scotia, improperly sorted waste is not collected. Typically, information as to what the householder or business should do differently is left on a note attached to the uncollected bags. In each of Prince Edward Island, Nova Scotia and New Brunswick, the waste management system includes "garbage police" and/or information personnel who explain the do's and don'ts to assist householders and businesses to meet the requirements of the system.

Disposal Technology

Participants pointed out that Nova Scotia has successfully combined the use of recycling and landfills. Removing organic material from landfills through composting would reduce the potential for leachate production, gas formation, gulls and other pests. Landfills maybe less expensive than incinerators to build and operate. The need for on-site management at waste management facilities was mentioned frequently during roundtables and in written submissions, such as those from the Town of Traytown and Local Service District of Noggins Cove.

"Landfills are not what we have here. Engineered landfills are clean and acceptable. They are continually attended, have leachate collection, and methane collection. Proper landfills cost more but are worth it."
- David Peddle, Grand Falls-Windsor

There were several strong statements against incineration. There were also suggestions that incineration be considered, but only after recycling and composting have been maximized. Other views were that even state-of-the-art incinerators should not be used. Modern incinerators are extremely costly to build and operate, and there is an ongoing cost of meeting the ever increasing regulations. However, there was also the suggestion that we should have open minds about new technology. It was also stated that incineration maybe the only alternative for isolated communities.

"Incineration creates dioxins and furans, known cancer causing toxins and life cycle analysis must consider health, and health care costs."
- Edward Smith, Community Recycling and Waste Management Committee, Corner Brook

Environment Canada provided information and advice to the Committee in a written submission. Their conclusion is that "while bigger is not necessarily better, it probably is in the case

of waste management. Fewer, and therefore, bigger waste management sites should be considered a positive environmental move in Newfoundland and Labrador." They recommend that "the Province develop guidelines that prescribe criteria for siting, design, operation and monitoring of new landfills and criteria for closure of existing sites." Environment Canada's submission referenced the ongoing work on Canada Wide Standards, including those for municipal incineration.

Hazardous Waste

"It's not just money and a truck to solve the problem - what about effects on our water table from our dump or another dump? Used motor oil, detergents, they all go to the dump."
- David Clarke, Garnish

The proper handling and disposal of hazardous and household hazardous waste was a specific concern raised across the province. Disposal of hazardous materials is costly. Private business and industry typically contract for specialist services to dispose of hazardous materials. The general public has no ready means of safe disposal of materials such as garden chemicals (insecticides, herbicides, fungicides, fertilizers), paint or cleaning solutions, driveway sealant, varnish and propane tanks.

The MMSB has funded a three year pilot program of Household Hazardous Waste Days at various locations and a few communities have occasional household hazardous waste days. Occasional, one day events are not effective in reaching a large number of people or households. A progressive waste management strategy should include provisions for addressing hazardous waste.

4.2 Increase Waste Diversion

"These materials are resources. Towns should manage these as resources and make some revenues."
- Leo Molloy, Salvage and Metal Recycling, Marystown

Waste diversion removes materials from the waste stream. Typically, waste diversion includes waste reduction, re-use and recycling (the 3 "Rs"), composting and waste exchanges. It reduces the amount of material going for disposal, thereby extending the lifespan of landfill sites and improving environmental conditions at these sites. Materials that are diverted can create business and employment opportunities.

Waste diversion is not a new idea in this province. Many participants recalled stories of parents and grandparents making

furniture from old tea boxes or fish crates and reusing glass jars for jams and pickling.

Materials

"Go after the big products to reduce material going to landfill - cardboard, compostables, C and D debris!"
- Luc Erjavec, Canada Restaurant and Food Association

Increasing the kinds of materials that can be recycled was the most frequent suggestion for improving waste management. Roundtable participants identified a number of materials that could be recycled including cardboard (mentioned most consistently), paper and newspaper, plastics, glass, tires, and metals.

Cardboard: There is a market for cardboard, often referred to as OCC, old corrugated cardboard. There is no company or business using OCC in Newfoundland and Labrador. The closest facility that recycles cardboard into other, value-added products is in Nova Scotia with others in New Brunswick and Quebec.

There is no consistency in the treatment of cardboard throughout the province. Some communities are successful in arranging a contract with a recycler for collection of cardboard while others, even some in the same areas, are not. A representative of a local recycling company which does do some collection, baling and marketing of OCC, outlined some of the concerns with this material - bulky, needs a lot of storage space with associated fire and safety concerns; and a fluctuating market. He estimated that a market price of $70/tonne would be "break even" for moving cardboard out of Newfoundland and Labrador. The market price for OCC fluctuates and has been as high as $160/tonne with the current price closer to $25/tonne.

Paper and Newspaper: While some depots accept paper and newspaper, there are no in-province users of the paper and only limited use of newspaper by the three pulp and paper mills on the Island. A private recycler, who handles paper, mentioned that it is a labour intensive material to handle with stringent quality control demands.

The MMSB recently completed a six month investigation into paper stewardship programs. The research indicates that as

much as 33 per cent of waste paper in the province is being recycled. The disposal ban on cardboard from commercial sources put in place by the City of St. John's removes an estimated 75-85 per cent of OCC from the landfill. Stephenville has had a comparable disposal ban in place for some years and Corner Brook initiated a ban in July, 2001.

Plastics: Some depots accept certain types of plastic over and above beverage containers, as there is a market for them. Depot operators report that the public is frustrated by not being able to recycle all kinds of plastics. Several people were aware of a plastic lumber manufacturing facility that was expected to start operation on the West Coast and hoped this would provide an opportunity to recycle mixed plastics in the province.

"There is a lot of information on TV on recycling but we don't have anywhere to take materials."
- Randy Goodyear, Burgoynes Cove

Glass: Glass beverage containers are recycled as they are included in the province's deposit refund program. In the other Atlantic provinces, glass food containers are recycled as well, with processing facilities for glass located in New Brunswick.

Used Tires: Used tires are either buried in landfills or stockpiled - they are not burned in incinerators as they burn at very high temperatures and cause damage to the incinerator. While the Committee's public consultation was ongoing, the MMSB advertised for proposals for provision of a management plan for scrap tires in the province.

Metals: There is some metals salvage ongoing in Newfoundland and Labrador. Vehicle wrecks and white goods (stoves, freezers, refrigerators) are segregated at several disposal sites. There are ongoing efforts by a private contractor to increase collection of these materials through use of a mobile shredder. One estimate indicates that 10,000 to 15,000 tonnes of scrap vehicles, white goods and metals are buried in landfills every year in the province. It was suggested that environmental protection requirements should be set for metals salvage operations and high-grading should not be allowed. At the Westmorland-Albert regional site in New Brunswick, for example, there is a contract in place for removal of freon from scrap freezers and refrigerators, prior to these being available for metals salvage.

"A guy in Norris Arm picked 2000 cans out of Norris Arm dump in two days... I don't understand people throwing these away, it's throwing away money."
- Angus McLoughlin, Norris Arm

Composting

Composting at the household, community, or greater scale was suggested frequently during the discussions, as a strategy for both removing a large amount of waste from disposal and turning waste into a useful product. Organic material makes up approximately 35 per cent of residential waste. Several areas in the province, such as La Scie and Hermitage, indicated residential composting was increasing. Corporate or government subsidized programs for backyard composting were suggested with the large scale commercial composting only possible in major population centres. There are markets for compost through gardeners, commercial green houses, and municipalities.

Incentives and Barriers

"Make recycling convenient - seniors, especially don't like to keep "garbage" for weeks."
- Ed Evans, Botwood

Participants suggested several means of increasing the kinds of materials recycled in the province. Suggestions included deposit refund programs for additional materials; subsidies to processors; subsidies for transportation either from sources to a depot or from depots to markets; assist depot operators to purchase equipment such as balers to expand their capability; establish major central recycling centre(s); establish a stabilization mechanism e.g. a floor price for recycled materials; expanding the existing system of Green Depots; use of curbside collection; providing drop-off bins for recycling in easily accessible public places; and transfer stations for recyclables in rural areas.

"In many cases, people don't want cash but do want convenience."
- Jim Tessier, Grand Bank

The economic incentives for recycling can and do serve to encourage and reward effort and success. While we heard "make recycling easy, convenient" some of the most innovative and successful recycling efforts take place a long way from convenience.

On the south coast of the Island, provincially operated passenger ferries transport recycled beverage containers collected by schools, to the nearest depot, at no charge. The community of McCallum, served only by ferry, was one of the top ten school recyclers, winning a computer for the school.

The Committee heard some of the results of the efforts of communities from Rigolet to Nain to participate in the province's beverage container recycling program. All of the communities on the north coast of Labrador have on-going recycling initiatives. For example, the school in Makkovik has involved the whole community in recycling and organizes weekly recycling drop-off and collection. Recycling has raised more than $10,000 for the school, replacing all other fund raising initiatives.

The coastal communities of Labrador south of Lake Melville are involved in a variety of waste management initiatives, often in conjunction with the Quebec Labrador Foundation - from waste audits through clean-ups and community recycling and awareness campaigns.

Recycling brings additional funds to individual schools but the school recycling program also benefits the communities. It encourages all residents to participate as well as instigate additional environmental initiatives, such as community clean-ups, hiking trails, and participation in Tidy Towns. For example, the Quebec Labrador Foundation's project report indicated the overall participation rate for waste management activities in Cartwright was 45 per cent and that "no other single volunteer activity in Cartwright, including church, involves a larger percentage in the community."

Increasing waste diversion will require addressing current barriers identified by participants. For households, the main barriers are space to store materials, convenient access to a recycler, and the cost of transporting materials. Communities identified access to depots, depots lacking the space and equipment such as balers to handle more materials, and the cost of transportation of materials as barriers. They also have found that recyclers are not always willing to take materials, especially if the market price is low and suggested there is a need for more competition in the recycling industry in the province.

Social Benefits

As well as having environmental and economic benefits, waste diversion also provides a social benefit. Recycling operations are providing useful, meaningful training and employment to developmentally delayed adults in the Lewisporte, St. John's and Corner Brook areas, through the Calypso Foundation, Ever Green Recycling and the Sedler Group respectively.

The Calypso Foundation began their program of recycling (and employment) 25 years ago. Currently, 18 people are employed in recycling with the Foundation. Ever Green started their recycling operation in St. John's 10 years ago and, currently train and employ 80 people full time.

School Recycling Program

The school recycling contest offered by the MMSB motivates educators, children, parents, and the surrounding school community to increase their participation in beverage container recycling. This is evident in the 80 per cent school participation rate during the 2000-2001 school year (275 schools), and the 53 per cent increase in participation rate over the previous school year. During the 2000-01 school year, 5.7 million beverage containers were recycled. In addition to the matching refunds, MMSB also awarded 12 computers to schools across Newfoundland and Labrador. The computers, valued at $1,500 each, were awarded to 10 schools for recycling the largest number of beverage containers per student in their school district, while the other two computers were awarded through a random draw from among schools participating in the contest.

Separation and Collection of Recyclables

A first step in waste diversion is taken by separating recyclables at source, whether that is a residence, a commercial operation, an institution or a business. There were several suggestions as to how source separation could be encouraged - a limit on the number of garbage bags per household per week;

no collection of unsorted garbage; pay per bag of garbage; pay for plastic bags in stores; differential tipping fees at waste management sites with higher cost for unsorted materials; and education programs.

"It must be made cheaper for citizens to recycle than to throw everything into a single waste stream. Citizens can have only so many black bags picked up for free and then they will be charged for every bag beyond that. Recycling containers will be picked up free of charge."

- Peter Earle, The Campaign for Progressive Waste Management

Prince Edward Island's waste management corporation has developed sorting guides for different types of businesses, e.g. pharmacies, hair styling salons, grocery stores etc. and provides these "how-to" guides, plus one-on-one training, to businesses of all sizes.

A system of separation of wastes at disposal sites can also divert waste from disposal. Some sites in Newfoundland and Labrador already separate freezers, snowmobiles, vehicle wrecks, and tires. However, waste segregation can be expanded, for example, to include areas designated for construction and demolition materials, and the like, leading to controlled reclamation or salvaging operations.

Many participants were familiar with the curbside collection system in Halifax, Nova Scotia and other areas and suggested something similar for this province. There are collector trucks that have separate compartments for waste and recyclables. Pickup of different kinds of waste can also be scheduled so households know what to put out for collection each week. Alternatively, different coloured bags or carts identify the type of waste (e.g. compost, recyclables).

With curbside collection and drop-off bins or transfer stations, the individual householder does not get the refund for any deposit refund materials. Rather, the waste management "manager" (whether the community, a private operator, or a regional waste management agency) sorts and markets the recyclables for offsetting revenue. A hybrid system combining collection and depots (whereby individuals could bring in recyclables) was suggested for Newfoundland and Labrador.

4.3 Regional Waste Management Systems

"What we're saying, is that if we work together, pool our funds, it's a sizeable pot of money - we can do more."
- Doug Mills, Councillor, St. Anthony

In some of the round table sessions, communities in the area identified their present costs to maintain the community's landfill or incinerator. It became apparent that considerable amounts of money are being spent and, while an individual community did not have sufficient tax base to support a modern waste management system - together, the communities had significant resources to put toward waste management.

Roundtable participants also recognized that the use of central facilities had the potential to make recycling of more kinds of materials feasible, through economies of scale. While some raised concerns about illegal dumping by communities far from a central disposal site, others suggested ways to meet the needs of these communities, such as using transfer stations.

"With our settlement patterns, if we don't buy into regionalization for recycling, we simply can't afford it, there won't be enough material at any one location. We have to adopt the concept of regionalization."
- Fred Best, Mayor, Town of Clarenville

In several provinces, including the other Atlantic provinces, communities have pooled resources to establish regional waste management systems, accomplishing together what is difficult to do individually. In New Brunswick and Nova Scotia, for example, regional waste management systems work effectively for populations of 35,000 to 300,000, with one-way haulage distances of up to 150 kilometres. Regional systems allow for efficiencies in contracting for collection and for operation of fewer facilities. They also result in concentration of recyclables increasing the possibility of adequate volumes for cost effective collection and marketing.

There is a range of technology in use in waste management. One rural based system in Nova Scotia, serving a population of 35,000 through a combined landfill, composting and materials recycling facility, made effective use of simple technology, keeping capital costs manageable ($1 million for composting plant, $1 million for recycling facility) and employing people not machines for some tasks.

In Newfoundland and Labrador, some areas have begun preliminary work into studying the possibility of regional waste management. Much of this work is being funded by the Newfoundland and Labrador Waste Management Trust Fund.

Areas presently investigating the potential for a regional waste management system include Labrador West, the Great Northern Peninsula (Bird Cove and North), the Labrador Straits area from L'Anse au Clair to Red Bay; the Burin Peninsula; and the West Coast, from Port aux Basques to Gros Morne National Park and Jackson's Arm in White Bay. Roundtable participants in other areas mentioned that they are considering regional studies, e.g. Gander area; Connaigre Peninsula; and Badger - Grand Falls-Windsor - Lewisporte area.

"The possibility of regionalization - five years, not do-able, but now! Time is right. And not just waste, we are coming together in education, in tourism, in everything. It's a necessity."
- Calvin Hayley, Tourism, Elliston, Bonavista Peninsula

Communities in these areas have decided, voluntarily, that they form a potential waste management region, largely based on geography - not on any existing administrative boundaries. The potential regions vary in size and appear to be based on the practicality of system delivery (e.g. road network, numbers of communities and households).

Cost and Financing

While many participants expressed support for a regional approach to waste management concerns about the cost of such a system were raised. Several participants stated that within any waste management region, there would have to be a formula used so that all households in a region would pay the same for waste management. As a councillor for Lewisporte said "no preference for closeness, no penalty for distance."

The Newfoundland Environmental Industry Association's submission discussed financing for a new waste management system. The Association suggests that financing should be on a "user pay" basis, thus putting the cost of proper waste management onto the users of the system. They further suggest that private-public partnerships between companies and municipalities can be part of the financing for the significant investment in infrastructure (disposal sites, recycling facilities, transfer stations, etc.) that will be necessary.

"We are so far behind, I would rather leap-frog than go step by step, but we have the realities of our situation. All of these changes cost money, maybe $50-$100 million. Solutions have to fit the area and circumstance. We can export our solutions elsewhere."
- John Drover, St. John's Clean and Beautiful, St. John's

NEIA states "to control costs, every region will not have its own landfill and/or incinerator. Any size modern landfill will cost millions to design and build, making the feasibility for all regions of the province to have their own facility, unlikely." Their submission also points out that waste diversion has the

potential to reduce both capital and operating costs, plus contribute offsetting revenue. NEIA concludes that "with user pay, waste diversion and private-public partnerships, financing of new waste management system(s) becomes feasible."

The regional waste management systems in New Brunswick and Nova Scotia are financed on per household basis through municipal taxes, revenues from waste diversion, and tipping fees. Tipping fees are set by the regional system's management group. In Nova Scotia, the fees range from $60-$110/tonne, at the Westmorland Albert facility the tipping fee for residual waste is $48/tonne and more for unsorted waste with no charge for recyclables. In Newfoundland and Labrador, most sites do not have a tipping fee. At the St. John's Regional Sanitary Landfill, the tipping fee is $23/tonne for all types of waste material.

"In Lunenburg County, we started way back with open fires, open dumps; moved through teepee incinerators, cyclone incinerators, and now have today's system. Waste management is not cheap - but what is? What will happen if we don't protect the air and water?"

- Lee Nauss, Councillor, Municipality of the District of Lunenburg, Nova Scotia

4.4 Ongoing Government Support Through Policy and Actions

Government actively sought the interests and concerns of citizens regarding waste management by means of this independent Advisory Committee. Strong support for change was indicated in the Committee's discussions with a wide range of associations, communities, interest groups and private citizens, reflective of a wide range of political thinking.

"It's a good step for the province to do this consultation. The next one must be implementation. Don't fade away into the sunset. We want to see some action."

- Lloyd Dalton, Local Service District of Hillview-Adeytown

During each roundtable discussion, it was emphasized that strong and continued Government support through policy, legislation, and action would be essential in order to achieve new standards of waste management.

Participants identified many ways for Government to demonstrate support:

"It is going to take time - but it takes just a start. It will take a long time to get people to change and to bring less to landfill. Government should do more regarding awareness to make this time shorter."

- Sandra Broomfield, teacher, Makkovik

- Government should implement a public awareness and education program about waste management.
- Government should continue to work with associations and programs such as the Newfoundland Environmental Industry Association, the Green Depot Association, Tidy

Towns, St.John's Clean and Beautiful, and the Newfoundland and Labrador Federation of Municipalities.

- Government support for a regional waste management approach is essential through political and policy support as well as financial support for facilities and equipment. There can be no exemptions from participating in a regional system and Government must also find a means to bring unincorporated areas into the regional waste management system, paying their fair share of costs.

- Government may have to enforce participation in regional waste management systems through site closures and mandatory community participation in regional sites. A move to a regional waste management service can be negatively affected when some of the expected participant communities have been allowed to continue using their community disposal site. The Exploits Regional Services Board, for example, had expected that the regional site would handle the waste from an additional five communities. However, permits for these municipalities' disposal sites have continued to be renewed and, in one case, a new community disposal site constructed.

"We haven't just sat around, you know. In 1992 we started a regional association, by 1994 we wanted a Cadillac incinerator, and recycling. We had the vision, we could see it - service all the communities, close out the old sites, create jobs... we don't want to talk about this in another ten years."
- George Cooper, Grand Bank

Government's role also includes clear guidance on disposal standards and technology; ensuring site locations balance environmental concerns and costs and meet the needs of both residents and the tourism industry; and ensuring waste disposal sites are carefully designed, constructed and operated according to accepted standards. Health and safety issues at existing disposal sites should be addressed, such as scavenging at landfills, smoke and odours from incineration or open burning, and illegal fires set and spreading beyond the dump site.

It was also suggested that the provincial Government should lead by example and review government wide procurement policies for the practical implementation of waste management policies as well as implement policy and procedures for a wide range of recyclables e.g. mandatory paper recycling, and use of recycled paint for government work.

4.5 Public Education

At all roundtable sessions, the need for public information and education about waste management was emphasized - what it is, why we need it, and how to do it. There will be major attitude and behaviour changes necessary to achieve waste diversion. Comments from participants indicated that a wide reaching education program was necessary both to initiate waste diversion and to keep waste management in the public eye.

"Children are keen, are aware that more materials should be recycled and are wondering why not here. Practice has not kept up with education in this province."

- Michelle Cleary-Hare, Councillor, Town of Harbour Grace

The Committee found that schools are playing a key role in raising environmental awareness and, specifically, in promoting recycling. The Committee consistently heard that "kids are on side with recycling", and they learn about it in school.

Many schools in the province are teaching environmental issues and actively promoting and practising recycling. Schools in northern Labrador communities use plays, crafts and gifts from recycled materials, and student designed posters for community education. The Committee supports the suggestion from the north coast of Labrador communities for a Teachers' Forum for a face-to-face exchange of ideas, methods and projects to increase the understanding and participation in all aspects of waste management Demonstration projects have been useful in raising public awareness, e.g. composting in Corner Brook, and a boardwalk using materials from a demolished building in Rigolet.

"Launch a major recycling and waste management initiative along the lines of "The Matthew Celebration" to put some priority on it, province-wide."

- Bev Burry, Terra Nova National Park

The public education program necessary to implement and maintain waste management will require a significant financial commitment. The Multi-Materials Stewardship Board spent close to $1 million on a province-wide promotion and advertising campaign for the beverage container deposit refund program. Representatives of waste management systems in both Nova Scotia and New Brunswick indicate a rule-of-thumb estimate for education programs is $2-$3 per person per year.

There are many groups and associations already involved in environmental education and that could be an important part of public education about waste management. These groups

include various community associations and Regional Economic Development Boards; Tidy Towns, the Quebec Labrador Foundation; NEIA, and non-government organizations such as the Conservation Corps. Government should take the lead role in public awareness, in partnership with industry, community groups, schools, and existing programs.

5.0 LEARNING FROM OUR NEIGHBOURS

Throughout the consultations, the Committee was advised to learn from experience elsewhere, and to this end, members of the Committee toured key examples of waste management systems in New Brunswick and Nova Scotia, prior to completing this report.

New Brunswick

In the mid 1980's, the province of New Brunswick established 12 waste management regions, six with regional disposal facilities, and began a focussed program of closing out existing disposal sites. Each waste management region is financially independent, supported by the area communities and managed by a Solid Waste Management Commission. A Commission's Board of Directors is composed of representatives from area communities and facilities are owned and operated under a variety of arrangements.

Fundy Region Solid Waste Commission: The facilities developed and operated by the Fundy Regional Waste Management Commission serve a population of approximately 125,000 people, including the city of Saint John. This system incorporates drop-off bins for recyclables with curbside collection of compost from carts and residual garbage. A community education centre is located at the landfill site itself. The regional landfill site received special recognition in the Communities in Bloom award to the City of Saint John.

Throughout the Fundy region, there are groups of bright blue drop off bins. These are located strategically, such as at shopping malls, to make drop off of recyclables as convenient as possible. A typical drop off location is wheelchair accessible with labelled bins for cardboard, newspaper, glass, paper, tins, and mixed plastics. Commission employees monitor each location to ensure they are litter free, clean and emptied as needed .

The Commission has just initiated a curbside collection for compostable materials with a central composting plant located at the regional, engineered landfill site. The Commission has contracted with a private company to collect, sort, bale and market the recycled materials. The contractor pays the

Commission for the materials and retains the revenues from the recycling operation. Collection trucks travel up to one and a half hours, one way, to serve the Fundy Region. In other waste management regions of New Brunswick, one way haulage times are as much as two and a half hours.

Westmorland-Albert Solid Waste Corporation: The Westmorland-Albert waste management facility situated in Moncton, New Brunswick, operates a wet dry system of waste management, combining separation at source whether residential, business or industry, with curbside collection. Wet waste includes food waste such as dairy products, fruit, meat, oats and grain products, coffee filters, tea bags and other materials such as diapers, pet litter, and wet paper towels. Dry waste includes cloth, glass, metals such as aluminum pie plates or foil, paper, plastics and other materials such as rubber gloves, light bulbs, cosmetics, and styrofoam.

Contents of wet bags are shredded and composted on site, contents of dry waste bags are sorted at the plant with marketable materials extracted, baled and sold from site. This facility serves 240,000 people with one way haulage distances of as much as 150 kilometres. The corporation has an interactive community information and education program.

This regional site provides recycling, composting and land filling operations at a single location. The recycling and composting operations are highly mechanized and the site employs more than 50 people. Cost of operations is covered through municipal taxes, recycling revenues and tipping fees. The Commission has recently initiated a program whereby communities that better the national average for waste diversion are given rebates.

In addition to the source separation by households and businesses, wastes are further segregated at the disposal site for further diversion and recycling. There are designated areas for household hazardous waste, wood, tires, sorted construction and demolition debris (C and D waste), propane tanks, vehicles, and white goods (freezers, refrigerators, stoves, etc). There are different tipping fees to encourage source separation, for example unsorted C and D waste costs $100/tonne, while sorted C and D waste costs $18/tonne.

Nova Scotia

Nova Scotia implemented a province wide waste management strategy in 1995. The province was divided into seven waste management regions and a program to close 75 per cent of existing landfills and establish new landfill standards was initiated. The province focussed on waste diversion, with efforts to create value added products and/or find markets for materials diverted from disposal. These efforts were supported by a series of disposal bans, phased in through 1995-1998.

Members of the Committee met with Barry Friesen, Manager, Solid Waste Resource for Nova Scotia and Brian Smith, Manager, Solid Waste Facilities, Halifax Regional Municipality while they were in Corner Brook in June. The Committee also met with Lee Nauss, Councillor, responsible for introducing large scale composting in Lunenburg county of Nova Scotia.

Cumberland County: The regional waste management committee in Cumberland County, northwestern Nova Scotia, operates a combined landfill, composting, and materials recycling facility for a rural area with a population of 35,000.

The Cumberland County recycling and composting facilities use the same principles and some of the same equipment as the large sites, such as those at the Halifax Regional Municipality and Westmorland-Albert facilities - at "scaled-down" size and capacity, suitable for their situation. The general approach to operations is to decrease the level of technology and to increase the number and roles of employees. The in-vessel composting plant combines a concrete floor and walls with a fabric roof, such as those used for warehouses and on barns in western provinces. A specialized backhoe turns and moves the compost piles and employees, not computers, monitor and adjust the compost for temperature, moisture etc.

Halifax Regional Municipality: In Halifax Regional Municipality, the Committee members toured the materials recycling facility, one of the two large scale composting operations, and the facilities where the residual waste, collected at curbside, undergoes another sorting to remove

recyclables (that were missed during source separation) and any remaining organic materials in order to stabilize these before going to the landfill located at the same site. The stabilization process ensures that the landfill is effectively 'dry', without putrescible material.

Halifax Regional Municipality uses a "three stream" collection process. Each household is provided with a large, wheeled compost cart for organic material. Curbside collection of residential organic material is done bi-weekly. Recyclables in see-through blue bags, and paper (fibre) in separate bags are also collected curbside, weekly. The third stream, residual waste, is collected on a bi-weekly basis. Enviro-Depots are located throughout the province for the return of beverage containers under the province's deposit refund program.

Halifax Regional Municipality uses Public Private Partnerships to operate the waste management system. For example, the mixed waste processing and disposal facility at Otter Lake is owned by Halifax Regional Municipality and operated by a private company, the Mirror Group. The two large scale composting facilities were developed and are operated by private companies under contract to Halifax Regional Municipality.

6.0 RECOMMENDATIONS Where Do We Go from Here?

The basis for long term cost savings on waste management will be through reduction and reuse - at all levels, from the individual through households and up to national policy level. Education will be an important part of addressing reduction and reuse as well as recycling

Roundtable discussions emphasized recycling. Recycling is the most readily achievable means of waste diversion and is a key step in waste management. Our suggestions for moving forward include several recycling initiatives.

From our review of information provided through roundtable discussions, written submissions and visits to operating waste management systems in New Brunswick and Nova Scotia, the Committee has concluded that a successful waste diversion program must include:

(a) source separation of recyclable materials, whether in a household, a business, an institution or an industrial plant;
(b) a hybrid collection system combining collection from households (curbside collection) with drop-off locations, e.g. the Green Depots; and
(c) removing organic material from the disposal stream. This reduces the volume of material going for disposal by at least 30 per cent.

Waste management is both an environmental and an economic issue. The Committee has tried to balance the concern and need for change with the practicality of achieving acceptable approaches to waste management in Newfoundland and Labrador.

Recommendations

1) **Government should initiate a wide reaching public awareness and education program on waste management.** Initial focus should be on all aspects of waste diversion including reduce and reuse as well as the

more familiar, recycling. However, public education on waste management must be an ongoing effort.

2) **Building on the ongoing research initiatives of the MMSB, Government should direct the Multi-Materials Stewardship Board to initiate stewardship programs, as soon as practical and within the next six months, for cardboard and newsprint.** These two materials have been identified as contributing major volumes to landfills in the province, although both materials are recyclable with established markets elsewhere.

3) In order for modern waste management to be economically feasible, it will be necessary for communities to pool resources for regional waste management systems. **Government should continue to encourage communities to develop and implement regional waste management systems.**

4) **Government should ensure there is a regulatory basis for the establishment of regional waste management authorities, which includes local service districts and unincorporated areas.**

5) There are some areas of the province where a regional approach is not appropriate due to geographic separation and type of transportation links.

   In isolated areas, emphasis should be on improving existing disposal sites and enhancing opportunities for diversion, e.g. assisting with transportation of recyclables.

   As transportation links improve, regional systems may become feasible for these communities.

6) **Regional waste management systems must address hazardous waste.**

   The Committee believes all people in the province should have regular access to safe disposal of household hazardous wastes.

The MMSB should continue to investigate hazardous waste management in other provinces in order to provide advice and guidance to government and regional waste management systems planners.

7) A waste management strategy should maximize business and economic opportunities. **Government should consider means of encouraging entrepreneurs and innovators to investigate value added products as well as the viability of a central diverted waste marketing agency/waste exchange.**

8) A progressive waste management strategy must include composting. **Composting should be encouraged through information and demonstration projects for collection and composting techniques at the household, community and commercial scales.**

9) **Government should aggressively pursue industry stewardship agreements.** Suggested sectors are construction industry; dairy industry; fast food industry; major retail and grocery stores regarding excess packaging and plastic bag use; and health care.

10) **Government should initiate a study to determine the sources, volume and types of packaging coming into the province and the associated waste management policies and practices of sending and receiving parties. This study would provide information for a possible provincial policy on packaging.**

11) **Green Depots should continue to be an integral part of the province's waste management system.**

The Recycling Depot Operators' Association and the Multi-Materials Stewardship Board should continue to work together to establish operating standards and policies for depots in order to provide a consistent and high quality, customer oriented service throughout Newfoundland and Labrador.

12) **Government should work with organizations such as the Newfoundland Environmental Industry Association, Memorial University of Newfoundland, and the College of the North Atlantic to ensure that the training and research and development programs are available to support business and professional opportunities associated with the modernization of waste management in this province.**

7.0 A Final Thought

Throughout our discussions with the public we heard strong support for improved waste management.

Another message we heard consistently from people was that they don't want this report to disappear, to "sit on the shelf." They believe it is time, or passed the time, to address the growing concerns about waste in the province.

The public consultations on waste management is an important first step. Government must capitalize on the momentum built through the roundtable discussions and act now to develop and implement a progressive provincial waste management strategy.

The Committee believes that we have much of the foundation for a new approach to waste management in place - the Multi-Materials Stewardship Board, the Green Depot System, the first province-wide waste diversion programs, the work supported by the Newfoundland and Labrador Waste Management Trust Fund; and the interest and support of people throughout Newfoundland and Labrador.

The Waste Management Advisory Committee is confident that, once provided with the information to understand why and how we must change our approach to waste management, people in our province will make these changes. Government must continue to support their efforts through cost sharing policy, regulation, and enforcement.

APPENDIX 1

WASTE MANAGEMENT ADVISORY COMMITTEE

BIOGRAPHIES

Derm Flynn

Mr. Flynn is the President of the Newfoundland and Labrador Federation of Municipalities. He has a long involvement in municipal government as a previous Mayor of Wabush and Mayor of the Town of Appleton, a position he currently holds. Mr. Flynn is Chair of the Advisory Committee.

Catherine Barrett

Ms. Barrett is the President of the Recycling Depot Operators' Association of Newfoundland and Labrador. The Association represents the 37 Green Depots in the province and is an advocate for enhancing the recycling industry in Newfoundland and Labrador. Ms. Barrett is Executive Director of the Waterford Foundation.

Jessie Bird

Ms. Bird has been Councillor, Deputy Mayor and Mayor of Cartwright. She has also been the President and regional Vice-president of the Combined Councils of Labrador. In addition to her specific understanding of Labrador and community government, Ms. Bird has had direct experience in environmental issues through her work as a conservation ranger with the Department of Forest Resources and Agrifoods and with the Sandwich Bay Watershed Authority.

Priscilla Boutcher

Ms. Boutcher is the Mayor of Corner Brook. She is serving a fifth term on the Corner Brook City Council. Ms. Boutcher is President of the Great Humber Joint Council, and is the northwest Director on the Newfoundland and Labrador Federation of Municipalities Board of Directors.

L-R: Leslie Grattan, Priscilla Boutcher, Catherine Barret, Jessie Bird, Derm Flynn, Mary Byrne.

APPENDIX II

LIST OF SUBMISSIONS TO WASTE MANAGEMENT ADVISORY COMMITTEE

1. ABYDOZ, Rod Vatcher
2. Action Environment's Solid Waste Management Working Group, Proposal to Establish a Regional Small Volume Hazardous Waste Collection Programme for the North-East Avalon
3. Canada Mortgage and Housing Corporation (CMHC), Atlantic Business Centre, St. John's, Dawn L. Ring
4. Canadian Society of Environmental Biologists: Solutions to the Problem of Litter, Garbage, and Solid Waste in Beautiful Newfoundland, Resolutions from a Workshop of the Newfoundland Chapter of the Canadian Society of Environmental Biologists, Patrick M. Ryan, Department of Fisheries and Oceans, Science Branch and Murray H. Colbo, Biology Department, Memorial University of Newfoundland
5. David V. Jones, Mount Pearl
6. Environment Canada, Mount Pearl, Brian Power, Environmental Protection Branch
7. Exploits Regional Services Board, Gregory Stuckless, P. Eng.
8. Kathy Adams, Riverhead, Harbour Grace
9. Local Service District of Noggin Cove, Gerald Gillingham, Chairperson
10. Makkovik Town Council, David Dyson, Town Manager

11. Master of Applied Science (Environmental Engineering) Project Report: Composting Municipal Solid Waste at Robin Hood Bay Sanitary Landfill, August 6, 2001, Mary Pippy, Charlene Johnson, Brenda Rowe, Peter Menchenton, Harlow Snippen

12. Master of Applied Science (Environmental Engineering) Project Report, Newfoundland Incineration Study, Prepared by Kathy Adams, Sheldon Thistle, August 2001

13. Municipal Recyclers Limited, Corporate Profile, Prepared by Harry Spurrell, C.M.A., June 25, 2001

14. Municipal Works and Services, Town of Gander, Wayne Penney, Chair

15. Municipality of the District of Lunenburg, Nova Scotia, Lee Nauss

16. Newfoundland Environmental Industry Association (NEIA), Charlie Riggs, P.Eng., Executive Director

17. Ocean Net, Robert O'Brien

18. Parks Canada, A.C. Bird, Field Unit Superintendent, Western Newfoundland & Labrador Field Unit

19. Quebec-Labrador Foundation, Kathleen A. Blanchard

    - Third Year Report: Waste Management Project for Coastal Labrador and Quebec North Shore
    - Waste Audit for Three Coastal Communities of Labrador: Mary's Harbour, Cartwright, and Nain
    - Labrador Straits Waste Audit Report: Results, Analysis, and Recommendations
    - Waste Management Survey of Households and Store Owners in Mary's Harbour. Cartwright, and Nain, Labrador: Perceptions, Behaviours, and Willingness to Participate in Waste-Reduction Programmes
    - Waste Awareness and Education: School Workshops in the Labrador Straits

- Northern Penn: Reducing Waste
- The Labradorian: QLF project helping to protect Nain's environment
- List of Media Activity
- List of Publications
- Results of Hazardous Products Survey in the Labrador Straits
- Refrigerator Chart for Recycling and waste separation
- 1999 Caring for the Earth calendar

20. Rechargeable Battery Recycling Corporation of Canada, Frank J.E. Zechner, Barrister and Solicitor, Toronto, Ontario

21. Salmonid Association of Eastern Newfoundland (SAEN), St. John's, E. Bursey, P.Eng., Chair Environment Committee

22. Sheila Lee, Riverhead, St. Mary's Bay

23. St. John's Clean and Beautiful, Litter: A Problem in Our Province that Needs to be Solved

24. Straits of Bell Isle Regional Waste Disposal Committee, Meeting Of Municipal Officials, Thursday, April 5, 2001

25. Straits/St. Barbe Chamber of Commerce, Nina Genge, Development Coordinator

26. The Campaign for Progressive Waste Management, a Submission to the Advisory Committee presented by Peter Earle

27. The Clorox Company of Canada Ltd., David J. Douglas, B.A., Manager, Environmental Waste Programs

28. Torbay Environment & Trails Committee, Mike Wawrzkow

29. Town of Traytown, Sarah Patten

30. W.S.W. Nowak, Paradise